

REMARKS

In the Action, claims 11-26 and 28-37 are rejected. In response, claims 16, 29, 30 and 34 are amended, and new claims 38-45 are added. The pending claims in the application are claims 11-26 and 28-45, with claims 11, 30 and 34 being independent.

New claims 38-45 are added to depend from the independent claims and to recite additional features that are not disclosed or suggested in the art of record. Specifically, claims 38 and 39 depend from claim 11 and recite that the slip preventer is coated onto the shaped strip as a thin layer where the thin layer has a thickness less than the dimension of the shaped strip. Claim 39 depends from claim 38 and recites that the shaped strip has a top surface with a concave recessed shape and where the antislip material is formed on the top surface. Support for these features is found on pages 3 and 5 of the specification and Figure 1. In particular, pages 3 and 5 of the specification disclose that the slip preventer is applied as a thin layer, and thus, inherently has a thickness less than the dimension of the shaped strip. Claims 40 and 41 depend from claim 30 and claims 42 and 43 depend from claim 40 and correspond substantially to claims 38 and 39. Thus, claims 40-43 are supported by the specification and drawings as originally filed. Claim 44 depends from claim 42 and recites that the second plastic material is applied to the top surface of the shaped strip as in claim 30. Claim 45 depends from claim 11 and recites a fastener coupled to the shaped strip and extending longitudinally along the length of the shaped strip as shown in Figure 1.

Claims 16, 30 and 34 are amended to overcome the rejections under 35 U.S.C. § 112, second paragraph. Specifically, claim 16 is amended to clarify that the slip preventer is extruded

onto the shaped strip. Claims 30 and 34 are amended to clarify that the fastener is received in the slot and coupled to the shaped strip as shown in Figure 1.

In view of these amendments and the following comments, reconsideration and allowance are requested.

Rejections Under 35 U.S.C. § 103

Claims 11, 15, 17 and 28 are rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 3,876,495 to Esler. Esler is cited for disclosing a welting cord or boxing strip having a core and an extruded foam coating which reduces slippage of the cord. The Action contends that the welting cord is capable of securing a cover to a cushion.

The welting cord of Esler is not a flexible shaped strip that functions as a fastener for securing a cushion covering to a cushion component as claimed. The welting cord of Esler is wrapped by a fabric as shown in Figure 1 to provide a decorative feature to the finished article. There is no mechanism for the welting cord to be connected to a fabric or cover so that the cover can be attached to a foam cushion. The foam coating on the core of the welting cord is not adapted to be inserted into a recess or slot in a foam cushion to secure a covering to the cushion.

In addition, Esler does not disclose or suggest a method of forming a fastener by forming a shaped strip from a plastic material, providing a slip preventer on the exterior periphery of the shaped strip where the slip preventer is a plastic that is softer than the plastic material of the shaped strip. There is no basis for the foam coating of Esler being inherently softer than the fibers of the core as suggested in the Action. The flexible and non-slipping exterior surface of the foam is the result of the cellular foam structure and not the material being softer than the

core. Esler provides no motivation or incentive to one of ordinary skill in the art to produce a fastener strip with a soft slip preventing coating so that the shaped fastener strip can be inserted into a recess in a foam cushion.

Esler also does not disclose shaping the slip preventer by extrusion as in claim 15, hot coating as in claim 17, or coating as in claim 28 in combination with the method steps of claim 11. Accordingly, claims 11, 15, 17 and 28 are not obvious over Esler.

Claims 11, 12, 15, 17, 22-24, 28-32 and 34-37 are rejected under 35 U.S.C. § 103(a) as being obvious over South African Patent No. 9850877 A to Schulte in view of Esler and U.S. Patent No. 4,718,718 to Maruyama. Schulte has a publication date of March 31, 1999 which is less than one year prior to the October 30, 1999 effective filing date of the present application.

Enclosed is a Declaration Under 37 C.F.R. § 1.131 by the inventor establishing that prior to March 31, 1999, the claimed invention was completed in Germany by successfully performing and testing the claimed method. The Exhibits attached to the Declaration demonstrate that the profiled strip was coated with an anti-slip material and that the anti-slip material was coated onto the shaped strip. The anti-slip material was a rubber glue thinned with methethylketone. In view of this Declaration, the Applicant has antedated the earliest publication date of the Schulte patent. Therefore, the Schulte patent is not available as a reference in this application. Since the Schulte patent is not available as a reference, the rejection over Schulte either alone or in combination with the secondary references must fall. Accordingly, Applicants request the rejection be withdrawn.

Regardless of whether the Schulte patent is available as a reference, the combination of Schulte in view of Esler and Maruyama do not disclose or suggest the claimed invention. The

Schulte patent is cited for disclosing a flexible strip for securing a seat cover to a seat cushion. Esler is cited for disclosing the use of a foam material over a fiber core. Maruyama is cited for disclosing a rubber layer on an electric wire. The rejection is based on the position that it would have been obvious to modify Schulte to provide a shaped strip with the foam body of Esler or the rubber coating on the wire of Maruyama.

The cited patents either alone or in combination do not disclose or suggest providing a coating of an anti-slip material on the outer surface of a shaped strip. Furthermore, the combination also fails to disclose an anti-slip material on the outer surface of a profile strip for securing a cover to a foam cushion. The Schulte patent discloses that the ribs are sufficient to fasten the fastener strip to the foam body, and thus, provides no motivation or suggestion that other fastener means or coatings are needed.

The welting cord of Esler is not analogous to the fastener of Schulte or the claimed invention. The Action is incorrect by the statement that Esler discloses a coating on a plastic core to prevent slippage of the strip used in a seat cushion. Esler relates to a welting cord that is enclosed within the fabric that is used as a decorative feature on furniture. The welting cord is not used within a seat cushion and the foam coating of Esler does not prevent slippage between the foam cushion and the welting cord. The welting cord being enclosed within the fabric does not contact the foam cushion, and thus, does not provide the same function as the anti-slip coating on the shaped strip of the claimed invention. Furthermore, the foam coating on the fiber core of Esler is applied to provide bulk and a dimension to the welting cord. It would not have been obvious to one of ordinary skill in the art to apply the foam coating of Esler on a profile shaped strip of Schulte or the present invention.

Maruyama relates to a trim cover for use with a seat. Maruyama does not provide a coated wire that directly engages the foam cushion and does not engage the foam cushion to retain a cover to the cushion.

The Action contends that Maruyama discloses that it is known to coat strips that perform the same function “namely holding seat covers in seat cushions with rubber, which is an anti-slip material”. This position is inconsistent with the disclosure of Maruyama. Maruyama discloses the wires 15 as shown in Figure 3 with hook-like ends 15b referred to as a “pulling wire”. As clearly disclosed in column 3 of Maruyama, the pulling wire is covered with rubber to prevent the wire from striking against and rubbing the heater 40 when the driver sits on the seat thereby preventing damage to the heater. Furthermore, the wire 15 of Maruyama is enclosed within a loop 14 formed from the fabric material. Thus, the wire referred to in the Action is enclosed within the fabric, and thus, clearly does not provide an anti-slip means for securing the cover to the cushion. As disclosed in column 3, lines 11-15, the wires are pulled downward with the fabric loops and are “hooked to a cushion frame”. Therefore, the wire is mechanically hooked to a frame and the cover is not connected to the foam cushion by the wire being received within a recess as in the present invention. Furthermore, the rubber coating on the wire of Maruyama is not in contact with the foam cushion, and thus, incapable of securing the cover to the foam cushion.

In view of the above-noted deficiencies of Esler and Maruyama, the secondary references provide no suggestion or motivation to apply an anti-slip material to a profiled shaped strip for coupling the shaped strip to a foam cushion. Accordingly, it would not have been obvious to one of ordinary skill in the art to apply an anti-slip coating to the strip of Schulte since Schulte

provides no suggestion that the anti-slip material is needed and Esler and Maruyama provide no suggestion that an anti-slip material would be effective in securing a profiled strip to a foam cushion.

The Action suggests that it would be obvious to use a softer material for the anti-slip coating “since this would place the softer material in contact with the person sitting in the chair”. However, the anti-slip coating on the shaped strip is inserted into a slot in the foam cushion and does not contact the person sitting in the chair.

The claims depending from claim 11 are also not obvious over the combination of these patents and for reciting additional features that are not disclosed or suggested in the art of record. For example, the cited patents do not disclose the shore hardness of claim 12, extruding the slip preventer on the shaped strip as in claim 15, hot coating as in claim 17, the rubber coating of claim 22, either alone or in combination with the method of claim 1. The cited art clearly fails to provide any incentive to apply a slip preventing material between the recessed areas on the outer surface of the shaped strip as in claim 23. Accordingly, these claims are allowable over the art of record.

The cited patents also fail to disclose the configuration of the shaped strip as in claim 24, the coating method of claim 28, or the step of inserting the shaped strip into a foam cushion for securing the cover to the cushion as in claim 29, in combination with the method of claim 11.

Independent claim 30 is directed to a method for producing a flexible shaped strip by forming the shaped strip having a top surface with a longitudinal slot, a fastener received in the slot, and a slip preventer applied to the top surface of the strip where the slip preventer is a plastic material softer than the plastic material of the shaped strip. For the reasons discussed

above, Schulte is not a reference in this application. Moreover, Esler and Maruyama do not suggest applying an anti-slip material to a top surface of the shape strip to attach the shaped strip to a foam cushion. Accordingly, claim 30 and the claims depending therefrom are allowable over the art of record.

For the reasons discussed above, the combination of the cited patents does not provide the necessary motivation or incentive to apply the soft plastic material to recesses between the interlocking members on the shaped strip as in claim 31, or the shore hardness of claims 32 and 33, in combination with the method of claim 30.

Independent claim 34 is directed to a method of producing the shaped strip and securing a cushion covering to a foam cushion by forming the shaped strip having a top surface with a longitudinal slot, a fastener received in the slot and a second plastic material on the surface of the shaped strip to provide a slip preventing material, and thereafter inserting the shaped strip into the longitudinal passage of the foam cushion material. For the reasons discussed above, claim 34 is not obvious over the combination of these cited patents. The cited patents also fail to disclose the method of applying the plastic coating on the shaped strip as in claim 35, applying the plastic material to the top surface of the shaped strip as in claim 36, or applying the plastic material to an area between the longitudinal interlocking members as in claim 37, either alone or in combination with the method of claim 30.

Claims 12-14, 32 and 33 are rejected as being obvious over Schulte, Esler, Maruyama and further in view of U.S. Patent No. 4,057,956 to Tolle. For the reasons discussed above, Schulte is not available as a reference. Tolle is cited for disclosing an anti-slip layer on a steel cable and a coating to prevent flaring of wires when the cable is cut. This has no relation to the claimed

invention. The steel cables of Tolle are used for lifting or pulling objects. Thus, the cables of Tolle are unrelated to the welting of Esler, the securing wire of Maruyama or the shaped strip of Schulte. Thus, Tolle provides no motivation or incentive to one of ordinary skill in the art to provide an anti-slip material having the claimed hardness of claims 12-14, 32 and 33. Accordingly, claims 12-14, 32 and 33 are not obvious over the combination of the cited patents.

Claims 18, 19, 25 and 26 are rejected as being obvious over Schulte, Esler, Maruyama and further in view of U.S. Patent No. 5,095,915 to Engelson. Engelson relates to a catheter guide wire which has no relation to the flexible strip for securing a cover to a foam cushion. Engelson is cited for disclosing that coatings can be applied to thin strips by extrusion or dip coating. However, Engelson provides no motivation to apply an anti-slip material to a fastener as in the claimed invention. Thus, claims 18, 19, 25 and 26 are not obvious over the combination of the cited patents.

Claims 20 and 21 are rejected over Schulte, Esler and Maruyama, and further in view of U.S. Patent No. 4,874,670 to Boon et al. Boon et al. is cited for disclosing curing of resins by ultraviolet light. Boon et al. does not provide the deficiencies of the cited patents. Boon et al. is relevant only to the extent that UV and electron radiation are known to cure polymers. Boon et al. provides no suggestion of applying a UV-curable or electron radiation-curable anti-slip material to a shaped strip as in the claimed invention. Accordingly, claims 21 and 22 are not obvious over the combination of the cited patents.

New claims 38-45 are also allowable over the art of record. For example, the art of record fails to disclose the thin layer of the slip preventer material as in claim 38 or the shaped strip having a top surface with a concave recess shape as in claim 39 in combination with the

method of claim 11. Claims 40 and 41 depend from claim 30, and claims 42-44 depend from claim 34 and are similar to claims 38 and 39 and are allowable for the same reasons. Claim 45 depends from claim 11 to recite the fastener being coupled to the shaped strip and extending longitudinally along the length of the shaped strip. The combination of these features are not disclosed in the art of record.


Page 8 of the Action suggests that the claims do not require the surface of the anti-slip material to directly contact the seat cushion. This position mischaracterizes the claimed invention. The invention is specifically described as having the anti-slip material on the shaped profile to assist in the shaped strip engaging with the foam cushion. If the anti-slip material does not directly contact the foam cushion, the anti-slip material would serve no useful purpose and defeat the purpose of the claimed invention. Thus, this position in the Action is incorrect. However, claims 29 and 34 are amended to recite that the anti-slip material directly engage the foam cushion. Furthermore, as noted above, Maruyama uses the wire to hook the seat cover to the frame and the wire is enclosed within the loops formed by the fabric. Thus, the coating on the wire is clearly not an anti-slip material to assist in attaching the cover to the seat since the coating on the wire provides no useful purpose other than to prevent damage to the electrical heater.

On page 9 of the Action, the comments mischaracterize the problem solved by the invention. The invention provides the anti-slip material to improve the gripping between the shaped strip and the foam material. The coating of Esler resists slipping of the welting cord within the fabric loop. Maruyama is specifically directed to the problem of preventing damage to

the heater element while Tolle is directed to the problem of unraveling of steel cables. Thus, the secondary references are not directed to the same problem of the claimed invention.

In view of the above, reconsideration and allowance are requested.

Respectfully submitted,


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